



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4

ATLANTA FEDERAL CENTER

61 FORSYTH STREET

ATLANTA, GEORGIA 30303-8960

SEP 30 1999

General James E. Bickford, Secretary  
Kentucky Natural Resources  
and Environmental Protection Cabinet  
Capital Plaza Tower, 5<sup>th</sup> Floor  
Frankfort, Kentucky 40601

Dear General Bickford:

The purpose of this letter is to respond to your letter dated June 21, 1999, regarding the need for promulgation of federal water quality standards for the Commonwealth of Kentucky. I appreciate your support and understanding of this ongoing effort, and I am enclosing a copy of draft rule language under consideration which would address the portions of the Kentucky water quality standards in a disapproved status at this time.

It is my understanding that Division of Water staff, under your direction, have revised the Kentucky antidegradation policy which was released for public review and comment on June 15, 1999. Based on the information available at this time, these additional changes appear to bring the Commonwealth's procedures for implementation of antidegradation into full compliance with Clean Water Act requirements, should they be adopted into regulation. I also understand that the Commonwealth's current proposal includes water quality criteria for 2,3,7,8 tetrachloro-dibenzo-p-dioxin (TCDD) which also appear to meet Clean Water Act requirements. However, because these revisions have not yet been adopted by the Commonwealth or approved by the Environmental Protection Agency (EPA), it is necessary that EPA continue its rule making to promulgate replacement federal water quality standards for Kentucky.

The draft federal rule language is intended to address the portions of Kentucky water quality standards in 401 KAR 5:030 which I disapproved on August 7, 1997 [antidegradation], and on May 26, 1992 [dioxin]. These replacement rules do not include or reflect the provisions of any of the standards revisions proposed by the Commonwealth during the ongoing triennial review of water quality standards, since they have not been adopted pursuant to the laws of the Commonwealth or formally submitted to EPA for review under the authorities of Section 303(c) of the Clean Water Act.

The revisions retain the list of water body types initially designated by the Commonwealth for Tier 2 protection, yet add a provision to apply the Commonwealth's policy for Tier 2 antidegradation protection to all waters of the Commonwealth where water quality better than criteria is achieved. Although I realize that this may result in additional burdens when considered

in conjunction with the level of protection afforded Tier 2 waters by the Commonwealth, I recommend this approach as the clearest means to meet all Tier 2 requirements, as identified in the previous rule making by the Commonwealth. The draft rule language was prepared in coordination with EPA's Offices of Water and General Counsel and reflects their review and input. However, this draft language does not constitute a formal proposal. Any such proposal would need to be made by the Administrator of EPA.

On a related matter, I am also asking that you provide the information currently being used by the Commonwealth in the implementation of the socio-economic provisions of Subsection KAR 5:030(1)(5)(b). The Commonwealth has previously stated that:

"The process for determining under what circumstances economic and social development is important enough to allow a lowering of water quality has not been developed. The Cabinet and the review panel spent many hours discussing this process and come to no consensus. The Cabinet feels this is an important local decision that needs to be determined on a case by case basis. It is envisioned that procedures in 5(b) will incorporate an economic and social importance evaluation by the very nature of the analyses. The less stringent level of treatment decision (if allowed) will have been made with this in mind."

On August 7, 1997, EPA requested that the Commonwealth provide additional details regarding the implementation of the statewide policy in relation to the requirements of this subsection. On October 9, 1997, and on July 27, 1998, the Commonwealth submitted additional information to clarify the details for implementation of this subsection. Based on review of this additional information, EPA approved KAR 5:030(1)(5)(b) on October 14, 1998. (See enclosed letters.)

The current proposal for revising this portion of the procedures requires the following:

"... the applicant shall demonstrate to the satisfaction of the cabinet that allowing lower water quality is necessary to accommodate important social development in the area in which the waters are located, following the guidelines in "Interim Economic Guidance for Water Quality Standards: Handbook" (EPA, March 1995) ..."

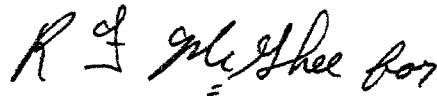
I am asking you to confirm that the current implementation of this provision is being conducted using the guidance document referenced in the proposed rule, or describe the existing process being used for its implementation.

Due to the absence of definitive language in the currently adopted and effective state regulation, any proposal by EPA to establish replacement standards relative to this portion of the antidegradation implementation procedure for the Commonwealth will specify that EPA's guidance document will be used in Subsection 5(b) determinations, unless a reference to EPA's guidance, or a substantially equivalent method for making Subsection 5(b) determinations, has

been specified by the Commonwealth, with EPA's concurrence or approval. Since this subsection has previously been approved by EPA, any rule making proceedings to replace or modify these provisions would be conducted under the authorities of section 303(c)(4)(B) of the Clean Water Act.

I encourage and support your continued efforts, and the efforts of your staff, in developing and adopting revisions to the standards of the Commonwealth. If you have questions concerning these issues or the enclosed draft federal rule, please contact me or Robert F. McGhee, Director of the Water Management Division.

Sincerely,

A handwritten signature in black ink, appearing to read "R. F. McGhee for".

John H. Hankinson, Jr.  
Regional Administrator

Enclosures (2)

## **DRAFT FEDERAL RULE LANGUAGE COMMONWEALTH OF KENTUCKY**

This document includes the following:

- A listing of the currently disapproved provisions of Kentucky's water quality standards,
- A discussion of the actions needed to correct those disapprovals, and
- Specific language recommended for inclusion in a proposed federal water quality standards regulation to correct those disapprovals.

### **1) Provisions Currently Disapproved - Tier 2 Water Body Selection Criteria**

#### **Disapproved Provision:**

**401 KAR 5:030 Section 1(3):** "Categorization of surface water to water bodies whose quality exceeds that necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water. Water bodies in this category shall include any of the following:

- (a) Surface waters designated as Kentucky Wild Rivers, unless they are categorized as outstanding national resource waters;
- (b) Outstanding resource waters other than those that support federally threatened or endangered aquatic species;
- (c) Surface waters that fully support all applicable designated uses and that contain fish communities that are rated "excellent" by the use of the Index of Biotic Integrity, which is in "Methods of Assessing Biological Integrity of Surface Waters," incorporated by reference in Section 4 of this administrative regulation; and
- (d) Waters in the cabinet's reference reach network."

#### **Discussion/Rationale at Time of Disapproval:**

In order to fully comply with the federal requirement, the Commonwealth would need to modify this subsection to include additional selection criteria for "water bodies whose quality exceeds that necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water," which should include all Tier 2 water bodies as outlined in 40 CFR §131.12(a)(2). The additional selection criteria must address the inclusion of Tier II waters for consideration of high quality water protection where water quality conditions exceed the levels necessary to support propagation of fish, shellfish, and wildlife and recreation in and on the water.

### **Recommended Replacement Provisions:**

**401 KAR 5:030 Section 1(3)(e) [New subsection]:** All other water bodies, where water quality for any parameter is better than the water quality criterion assigned for the protection of uses of warmwater aquatic habitat and primary contact recreation (including the water quality criteria established in 401 KAR 5:031 Section 2 (Minimum Criteria Applicable to all Surface Waters)).

### **2) Provisions Currently Disapproved - Tier 2 Consideration of Carcinogens**

#### **Disapproved Provision:**

**401 KAR 5:030 Section 1(5)(a)(5):** "Carcinogenic pollutants shall be limited as in use protected waters."

#### **Discussion/Rationale at Time of Disapproval:**

In order to fully comply with the federal requirement, the Commonwealth would need to modify this subsection to include consideration of lowering of water quality for carcinogens for Tier 2 water bodies in the same or similar manner for other parameters.

### **Recommended Replacement Provisions:**

**401 KAR 5:030 Section 1(5)(a)(5):** This paragraph, as adopted on July 12, 1995, is null and void, and no longer effective for surface waters of the Commonwealth of Kentucky.

### **3) Provisions Currently Disapproved - Water Quality Criteria for Dioxin**

#### **Disapproved Provision:**

**401 KAR 5:031(2)(2), Table 1, and 401 KAR 5:031(2)(5), Table 3:** The absence of water quality criteria for 2,3,7,8 tetrachloro-dibenzo-p-dioxin (TCDD) for the protection of human health in 401 KAR 5:031(2)(2), Table 1, and 401 KAR 5:031(2)(5), Table 3.

#### **Discussion/Rationale at Time of Disapproval:**

EPA disapproved the Commonwealth's deletion of the previously adopted water quality criteria for dioxin due to the documented presence of dioxin in the aquatic environment of Kentucky.

**Recommended Replacement Provisions:**

**401 KAR 5:031(2)(2) Table 1 - Water Quality Criteria for Protection of Human Health from the Consumption of Fish Tissue**

<u>Substances Linked to Cancer</u>	<u>Concentration (ug/l)</u>
<b>[2,3,7,8 tetrachloro-dibenzo-p-dioxin (TCDD)</b>	<b>0.000000014]</b>

**401 KAR 5:031(2)(5), Table 3 Domestic Water Supply Source Criteria**

<u>Substances Linked to Cancer</u>	<u>Concentration (ug/l)</u>
<b>[2,3,7,8 tetrachloro-dibenzo-p-dioxin (TCDD)</b>	<b>0.000000013]</b>